Executive Summary

Environmental Assessment
of the
Ballistic Missile Defense Organization
Cooperative-Engagement-Capability/PATRIOT (CEC/PATRIOT)
Interoperability Test

Proposed Action, Purpose and Need

As part of its program to develop technologies to protect against ballistic missiles, cruise missiles and high-performance aircraft, the Ballistic Missile Defense Organization (BMDO) proposes to conduct a test of radar equipment designed to detect, track and target these kinds of threats. However, no missiles will be used in conducting the test. The proposed test, termed the "Cooperative Engagement Capability/PATRIOT Interoperability Test" would continue the development of an innovative technology that will enable U.S. Army and U.S. Navy radar systems to work together to jointly track and counter air threats at longer ranges than is now possible.

The technology to be tested uses a network of radars with overlapping coverage to create a combined, larger, more detailed detecting, tracking, and targeting capability. The Cooperative Engagement Capability (CEC), a system developed by the U.S. Navy, will link radars from multiple platforms, including ships and aircraft and land, into a network to produce a single, composite picture of radar tracks.

The proposed test will link land-based Navy radar systems, a Navy AEGIS cruiser at sea, an airborne P-3 Orion aircraft, and an Army PATRIOT radar at a separate site. The test will simulate with computers the "cooperative" acquisition, tracking and engagement of various "threats" by combining the capabilities of several radars at once. This will be a test of radar, communications and computer capabilities only; there will be no actual missiles or missile launches involved in this test in any way. Although a PATRIOT radar will be involved, this unit is physically completely separate from PATRIOT missiles, which will not be present at any of the test sites, nor involved in the test in any way.

PURPOSE. The general purpose of this testing is to determine and demonstrate the capability of several radar systems, from different services, to jointly detect, track and target ballistic missiles, cruise missiles and high-performance aircraft at longer ranges than is now possible. As the ability to detect, track and target incoming threats is improved this would ultimately enable defensive systems such as the PATRIOT system to be employed more effectively not only in the aircraft defense role it was originally designed for, but also in an increasingly effective missile defense role.

NEED. Changing and increasing threats to the U.S., particularly from ballistic missiles, potentially carrying weapons of mass destruction, give rise to the need to develop improved

capability to detect, track and target such threats, so that they can be more effectively countered than is presently possible.

In accordance with the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality Regulations, 40 CFR parts 1500-1508, and E.O. 12114, an Environmental Assessment (EA) of the BMDO proposed action was developed through review of available technical and environmental documentation, an analysis of impacts by an interdisciplinary staff of environmental professionals, and consultation with local authorities.

Alternatives

The EA addresses the environmental impacts of deployment of all of the test elements, focusing on the impacts at one non-military test equipment location, Ocean City Municipal Airport. NEPA analyses for the other test elements are documented in categorical exclusions (CATEX) and are incorporated by reference in the EA.

Alternatives to the proposed action evaluated in the EA include 1) locating the CEC/PATRIOT test components at a site on Wallops Island rather than at the Ocean City Municipal Airport, and 2) not conducting the test at all (No Action Alternative).

Affected Environment

This environmental assessment describes the environmental resources that could be affected by the proposed action at Ocean City Municipal Airport, Maryland. The environment at Wallops Island, VA and that associated with the AEGIS cruiser and aircraft operations are addressed in the NEPA documents prepared for those test elements and activities. Available literature that included relevant EAs on other actions at the Airport was acquired, and data gaps were identified. To fill data gaps and to verify and update available information, installation personnel and Federal, state, and local regulatory agencies were contacted.

Twelve broad environmental components were considered to provide a context for understanding the potential effects of the proposed action and to provide a basis for assessing the severity of potential environmental impacts. The Federal and/or state environmental statutes, many of which set specific guidelines, regulations, and standards, regulate several of these environmental components. These standards provide a benchmark that assists in determining the significance of environmental impacts under the NEPA evaluation process. The areas of environmental consideration, discussed briefly as follows, are geology, topography, and soils; water resources; biological resources, including protected species and habitats; land use; recreation; air quality; airspace and air traffic; health and safety, including radar emissions safety; noise; hazardous materials and waste; socioeconomics, including environmental justice; and cultural resources.

Environmental Consequences

For each environmental resource, the assessment found that there would be either no impacts at all or minimal impacts that could be readily mitigated. In particular, potential health effects from exposure to radar emissions would not be a concern because the Airport site would be secured during the entire test period and the distance at which effects might be of concern would be

limited to a zone immediately in front of the radar, lying entirely within the secured area. Noise and air emissions from test equipment and power generators would not exceed environmentally acceptable levels. No protected species or sensitive habitats would be affected. No recreational or business activities at or near the Airport would be disrupted. No cultural resources would be affected and no issues of environmental justice were found to be of concern.

There would be no impacts caused by the other test elements proposed. The AEGIS would be involved in routine operations in the open ocean. The aircraft elements would fly in restricted airspace routinely used for the conduct of military tests. The Wallops fixed radar elements would do nothing different from their normal radar operations that might affect the environment.

The alternative of locating the CEC/PATRIOT mobile elements at Wallops would also not cause environmental impacts as documented in the attached CATEX. The alternative of No Action, although it would eliminate the potential for any environmental impacts to occur would not allow the BMDO to obtain the information which would be generated from the test.